

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 4172 (2005): Dimensions for radii under the head of bolts and screws [PGD 31: Bolts, Nuts and Fasteners Accessories]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE



भारतीय मानक

सामान्य उद्देश्य के लिए काबले और पेंच —
मीट्रिक श्रेणी — शीर्ष के नीचे की त्रिज्या
(दूसरा पुनरीक्षण)

Indian Standard

GENERAL PURPOSE BOLTS AND
SCREWS — METRIC SERIES — RADII UNDER
THE HEAD

(Second Revision)

ICS 21.060.10

© BIS 2005

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

NATIONAL FOREWORD

This Indian Standard (Second Revision) which is identical with ISO 885 : 2000 'General purpose bolts and screws — Metric series — Radii under the head' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendations of the Bolts, Nuts and Fasteners Accessories Sectional Committee and approval of the Medical Instruments, General and Production Engineering Division Council.

The original version of this standard was issued in 1967 and revised in 1982. The first revision was harmonized with ISO 885:1976. This second revision has been made by adoption of latest edition of ISO 885 published in 2000 to make pace with the latest developments taken place at international level.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain terminology and conventions are, however, not identical to those used in Indian Standards. Attention is drawn especially to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

**GENERAL PURPOSE BOLTS AND
SCREWS — METRIC SERIES — RADII UNDER
THE HEAD**

(Second Revision)

1 Scope

This International Standard specifies the sizes of the radii under the head and the transition diameters of metric series general purpose bolts and screws.

2 Dimensions

See Figure 1 and Table 1.

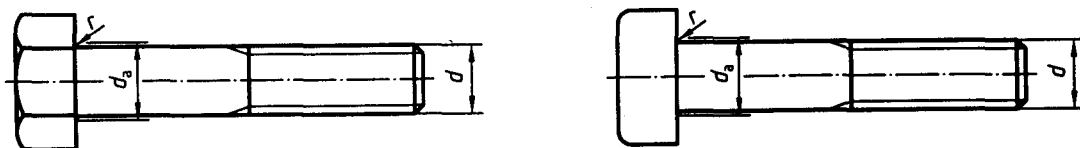


Figure 1

Table 1 — Dimensions r_{\min} and $d_{a, \max}$

Dimensions in millimetres

Thread diameter d	Radius r_{\min} product grades A, B and C	Transition diameter ^a $d_{a, \max}$		Thread diameter d	Radius r_{\min} product grades A, B and C	Transition diameter ^a $d_{a, \max}$	
		product grades A and B	product grade C			product grades A and B	product grade C
1,6	0,1	2	—	39	1	42,4	45,4
2	0,1	2,6	—	42	1,2	45,6	48,6
2,2	0,1	2,8	—	45	1,2	48,6	52,6
2,5	0,1	3,1	—	48	1,6	52,6	56,6
3	0,1	3,6	—	52	1,6	56,6	62,6
3,5	0,1	4,1	—	56	2	63	67
4	0,2	4,7	—	60	2	67	71
4,5	0,2	5,2	—	64	2	71	75
5	0,2	5,7	6	68	2	75	79
6	0,25	6,8	7,2	72	2	79	83
7	0,25	7,8	8,2	76	2	83	87
8	0,4	9,2	10,2	80	2	87	92
10	0,4	11,2	12,2	85	2	92	97
12	0,6	13,7	14,7	90	2,5	97	102
14	0,6	15,7	16,7	95	2,5	102	108
16	0,6	17,7	18,7	100	2,5	108	113
18	0,6	20,2	21,2	105	2,5	113	118
20	0,8	22,4	24,4	110	2,5	118	123
22	0,8	24,4	26,4	115	2,5	123	128
24	0,8	26,4	28,4	120	2,5	128	133
27	1	30,4	32,4	125	2,5	133	138
30	1	33,4	35,4	130	2,5	138	145
33	1	36,4	38,4	140	2,5	148	156
36	1	39,4	42,4	150	2,5	159	166

^a The transition diameter d_a is the diameter of the circle formed at the junction of the radius r and the bearing surface of the head.

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act, 1986* to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Director (Publication), BIS.

Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Catalogue' and 'Standards: Monthly Additions'.

This Indian Standard has been developed from Doc: No. **MGP/BP 33 (0403)**.

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones: 2323 0131, 2323 3375, 2323 9402

website : www.bis.org.in

Regional Offices:

	Telephones
Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	{ 2323 7617 2323 3841
Eastern : 1/14 C.I.T. Scheme VII M, V.I.P. Road, Kankurgachi KOLKATA 700054	{ 2337 8499, 2337 8561 2337 8626, 2337 9120
Northern : SCO 335-336, Sector 34-A, CHANDIGARH 160022	{ 260 3843 260 9285
Southern : C.I.T. Campus, IV Cross Road, CHENNAI 600113	{ 2254 1216, 2254 1442 2254 2519, 2254 2315
Western : Manakalaya, E9 MIDC, Marol, Andheri (East) MUMBAI 400093	{ 2832 9295, 2832 7858 2832 7891, 2832 7892

Branches : AHMEDABAD. BANGALORE. BHOPAL. BHUBANESHWAR. COIMBATORE. FARIDABAD. GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR. KANPUR. LUCKNOW. NAGPUR. NALAGARH. PATNA. PUNE. RAJKOT. THIRUVANANTHAPURAM. VISAKHAPATNAM.